## INTERNATIONAL SEARCH REPORT



A CLASSIFICATION OF SUBJECT MATTER IPC 7 B01J4/00 B01J19/26 B01F3/08

D21H23/04

B05B7/04

B01F5/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC  $7\ B01J\ D21H\ B05B\ B01F$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 387 247 B1 (CHEN YE-MON) 14 May 2002 (2002-05-14) column 3, line 65 - column 5, line 7 figures 1,2a	8-16,18, 23,24
X	US 945 143 A (SMAMEK JACQUES) 4 January 1910 (1910-01-04) figure 1	1,3-5, 8-11,14, 15,20-22
A	WO 99/43887 A (AHLSTROM MACHINERY OY; MATULA JOUNI (FI)) 2 September 1999 (1999-09-02) cited in the application the whole document	1,8
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Special categories of cited documents:      "A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
<ul> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  '&' document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
18 January 2005	25/01/2005
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,  Fax: (+31–70) 340–3016	Authorized officer  Vlassis, M

## INTERNATIONAL SEARCH REPORT

Internal Application No PCT/FI2004/000586

0.40	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	1017120047000380		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	F	Relevant to claim No.	
A	FR 952 711 A (TIJOUX M.PIERRE)		1,3-5,	
	23 November 1949 (1949-11-23) the whole document		8-11	
A	FR 1 453 925 A (CELANESE CORP) 22 July 1966 (1966-07-22) page 4, paragraph 4 - paragraph 6 figure 7		8-12,19	
	·			
		,		

## INTERNATIONAL SEARCH REPORT

Information on patent family members

Intermional Application No
PCT/FI2004/000586

			101/11	2004/000500
Patent document cited in search report	Publication date		tent family ember(s)	Publication date
US 6387247	14-05-2002	BR CA CN DE 6 DE 6 WO EP ES JP 200	240378 T 758217 B2 7417100 A 0013699 A 2383826 A1 1371413 T 60002741 D1 60002741 T2 0118153 A2 1218468 A2 2199858 T3 03509533 T 6736960 B1	15-05-2003 20-03-2003 10-04-2001 07-05-2002 15-03-2001 25-09-2002 18-06-2003 18-03-2004 15-03-2001 03-07-2002 01-03-2004 11-03-2003 18-05-2004 18-09-2002
US 945143	· .	NONE		
WO 9943887	02-09-1999	CA DE 6 EP EP WO JP 200 US 200	980437 A 262617 T 9908306 A 2321863 A1 59915810 D1 1219344 A2 1064427 A1 9943887 A1 02505179 T 02131325 A1 6659636 B1	27-08-1999 15-04-2004 04-09-2001 02-09-1999 29-04-2004 03-07-2002 03-01-2001 02-09-1999 19-02-2002 19-09-2002 09-12-2003
FR 952711	23-11-1949	NONE		
FR 1453925	22-07-1966	BE DE GB NL US	666811 A 1542039 A1 1109282 A 6508755 A	13-01-1966 26-02-1970 10-04-1968 14-01-1966